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(71) Applicants and
(72) Inventors: **MCDONALD, Duncan** [CA/CA]; 2027 Saltair Place, Victoria, British Columbia V8N 4S4 (CA). **BAILEY, Richard, A.** [CA/CA]; 8831 Carmanah Terrace, Sidney, British Columbia V8L 5E9 (CA).

(74) Agent: **COOPER, Michael, D.**; Barrigar Intellectual Property Law, Suite 290, 1675 Douglas Street, Victoria, British Columbia V8W 2G5 (CA).

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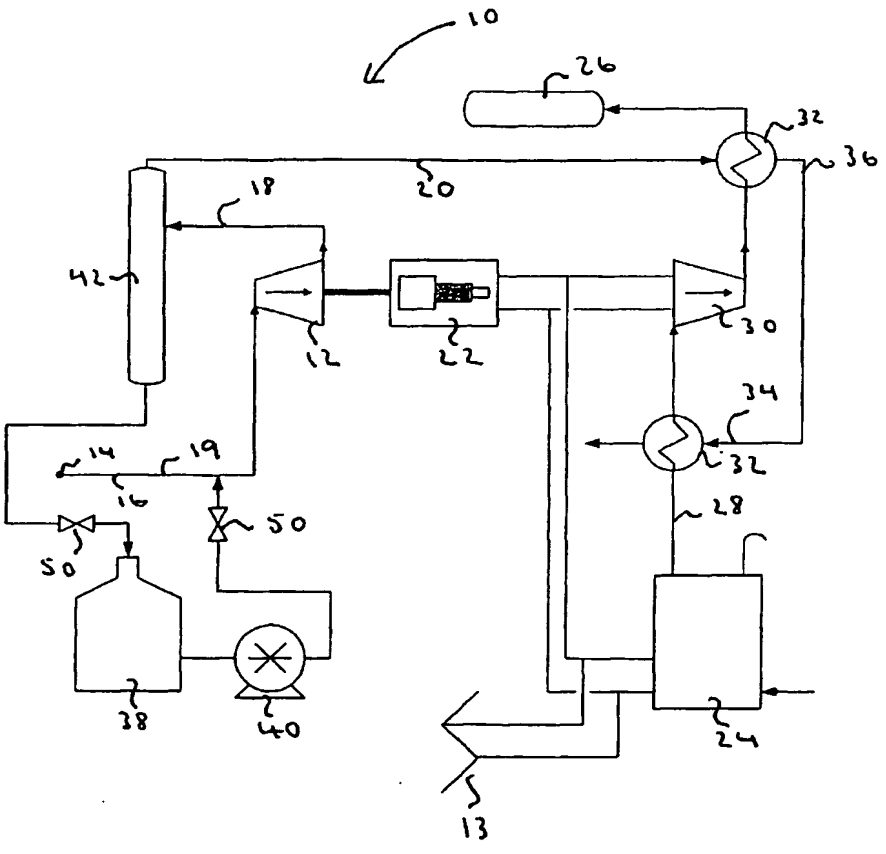
(54) Title: APPARATUS AND METHODS FOR GAS PRODUCTION DURING PRESSURE LETDOWN IN PIPELINES



(57) Abstract: Apparatus, methods and an installation are provided for reducing pressure in a carrier line, such as a natural gas pipeline, and capturing the resultant waste energy. The apparatus is comprised of a flow converter for gaseous communication with a carrier line and an electricity generator mechanically linked to the flow converter for transforming the excess energy resulting from the pressure drop into electrical energy, such that in use, the energy released from the pressure drop can be captured and utilized for the production of gases such as hydrogen.

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